TETRA TECH EM INC.

Rockaway 80 Corporate Center
100 Enterprise Drive, Suite 400
Rockaway, New Jersey 07866
Tel. (973) 659-9996 Fax. (973) 659-1287

March 15, 2006

Mr. Steve Maybury
New Jersey Department of Environmental Protection
Site Remediation & Waste Management
Division of Remediation Management and Response
Bureau of Northern Case Management
401 East State Street, 5th Floor
Trenton, New Jersey 08625-0028

Subject: **Response Plan**

Reference: **American Metro Site (Formerly the American Standard Site), Hamilton Township, NJ**

Dear Steve:

On behalf of Ford Motor Company, Tetra Tech is submitting the attached Response Plan for the removal of crushed concrete material at the American Metro site. This plan incorporates the specific requirements as outlined in the NJDEP Administrative Order issued to Ford Motor Company (Ford) on March 8, 2006 (EA ID #: PI V1166.

All information in this Plan concerning the crushed concrete on the American Metro site Property, including the origin of that crushed concrete, was obtained from EPI and/or from discussions with its employees, agents, and contractors. Other than sample data obtained by Tetra Tech or visual data collected by Tetra Tech employees, Tetra Tech has relied on this information in drafting this Response Plan.

This plan details the removal and disposal of crushed concrete material currently located on the American Metro property that was reportedly transported from the former Ford Edison Assembly Plant property located at 939 U.S. Highway Route 1 in Edison, New Jersey by Edgewood Properties Inc. (EPI). This Response Plan addresses the following major elements:

1. Identify and remove material, and dispose material at an approved disposal facility.

2. Implement and maintain dust control measures including air monitoring

3. Provide disposal tracking logs and documentation for the crushed concrete materials removed from the American Standard property.

4. Collect and analyze "post-excavation" samples from the soil located below the removed material to insure that no material is left at the site.

5. Submit progress reports to the NJDEP.

Ford intends to dispose these materials at the following permitted facility: BFI Conestoga Landfill in Morgantown, Pennsylvania. If necessary to meet the timing set forth in this Plan, Ford also proposes to use MCUA Middlesex County Landfill in East Brunswick, New Jersey. The sampling will be performed in accordance with the NJDEP Technical Requirements for Site Remediation.

Current Summary

The property in Hamilton Township is located at 240 Princeton Avenue and consists of the former American Standard manufacturing facility and a formerly wooded area. The entire parcel is being developed into 2 components: Parcel A is being developed as an office component by Preferred Real Estate Investments Inc. (Preferred) and Parcel B is being developed as a residential component by EPI. The crushed concrete was used for the construction of new roadway through both parcels.

At the American Metro property, crushed concrete material was used as aggregate for the construction of a road bed that is partially on Preferred's parcel and partially on EPI's parcel. This road, named American Metro Drive, is approximately 1,350 feet in length on the American Metro parcel. The crushed concrete material is estimated to be present in a 600 foot section of the road bed. The extent of this material has generally been identified by visual inspection and supplemented by analytical testing. American Metro Drive has been graded on the Edgewood Property, but has not yet been paved. A site map is included as Attachment 1.

Investigation and Delineation Sampling

American Metro Drive has a width of 30 feet and crushed concrete is reportedly located in the road bed to a maximum of 1.5 feet below grade. Assuming an average depth of 1 foot, Tetra Tech estimates that approximately 3,350 cubic yards of material is contained in the impacted sections of American Metro Drive on both properties. Based upon this volume of aggregate material, Tetra Tech collected a total of seven (7) samples of the crushed concrete material present within American Metro Drive to allow for a sampling rate of one sample per 500 cubic yards of material (See Attachment 1). These samples were collected by Tetra Tech on January 20, 2006. The sampling frequency corresponds to the disposal requirements set forth by MCUA landfill.

Tetra Tech field personnel collected samples of the crushed concrete material near the edge of the road bed. Based upon the disposal requirements set forth by Middlesex County Utility Authority (MCUA) landfill, the samples were analyzed for Total Petroleum Hydrocarbons (TPHs), Petroleum Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs), RCRA Characteristics, and Full Toxicity Characteristic Leaching Procedure (TCLP) Parameters.

Results from the sampling conducted by Tetra Tech are summarized in the Table included in Attachment 2. In summary, there was one exceedance of the NJDEP Action Level for TPH (12,300 ppm); some exceedances of the NJ Residential Direct Contact Soil Cleanup Criteria (RDCSCC) and the NJ Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) for PAHs; exceedances of the RDCSCC for PCBs; and two exceedances of TCLP Lead criteria of 5 ppm. The non-PCB exceedences were associated with known areas of concern as the crushed concrete was used in the cap layer on the American Metro property.

In addition, pre-excavation samples were collected by Edgewood Properties consultant, Environmental Liability Management (ELM) and Preferred's consultant, RT Environmental Services, Inc. A summary of the results from this sampling is presented in the Post-Excavation Sampling prepared by RT Environmental Services, Inc. and included as Attachment 3.

Removal and Disposal Procedure

To date, some of the materials have been removed from Parcel B, the Edgewood Property parcel. Specifically, material was excavated and removed on February 27th and 28th, March 1-3, and March 6th. In total, 2,493 tons (approximately 1,425 cubic yards) of material have been removed from the Parcel B section of the site. These materials were sent to the Casie ProTank facility in Vineland, NJ. The material is currently located at the Casie facility. Pending NJDEP approval, the material will be sent from Casie to its final disposal location, Gloucester County Landfill.

All crushed concrete material will be removed based on visual determination. If post removal laboratory samples indicate that additional soil needs to be removed, these removal actions will be conducted in accordance with this Plan. A site access agreement is in place between the site owner and Ford. The material will be transported by a licensed solid waste hauler to MCUA Middlesex County Landfill or BFI Conestoga Landfill. It is anticipated that the crushed concrete material will be transported to the landfill for use as cover material. A Tetra Tech site representative will ensure that all shipping manifests, bills of lading or any other required shipping documents have been properly completed for endorsement by the appropriate representative prior to trucks leaving the site. Further details on removal and separation of excavated materials on the American Metro property can be found in Attachment 3. No material will leave the site without prior written approval from the NJDEP.

Dust Management Plan

All on-site activities will be conducted in a manner to minimize fugitive dust emissions. To accomplish this, the following controls will be implemented:

- All material to be removed from the site will be covered properly to prevent dust migration

- A water truck and water spray will be used to control dust during removal and loading activities. Additionally, a road sweeper will be used at the site for routine road maintenance to actively control dust emissions.
- A real-time air monitoring program will be implemented before any removal work is performed. This will include monitoring of dust in the exclusion zone, at the perimeter of the site, and for personnel working in the exclusion zone. Also, a meteorological station will be placed at the site to record information such as daily temperatures, wind speed and direction, etc.
- Prior to trucks departing the site, proper decontamination of the vehicles/equipment will take place. Ford will use a crushed stone truck pad to perform dry decontamination of all trucks prior to their departure from the site. This control will adequately address the concern for crushed concrete material leaving the site.
- Cover (tarps/poly sheeting) will be installed promptly following the completion of excavation.

Ford will immediately cease removal activities at the site if any of the air monitoring action levels or other standards in the attached dust management program is exceeded. In addition, Ford will cease work if the control measures detailed in this Plan or any other provisions of the Administrative Order, regulations or law, are not being met. If this occurs, Ford will not resume work activities until the issues are resolved to the satisfaction of NJDEP.

The specific activities to be conducted for the air monitoring at the site are presented in Attachment 4.

Post Removal Sampling

Parcel A

In accordance with the NJDEP Technical Requirements for Site Remediation, post-excavation samples will be collected from all areas where material was excavated. (Bottom of excavation - 1 sample per 900 square feet; Sidewall – 1 sample for every 30 linear feet of sidewall). The post-excavation samples will be analyzed for PCBs and will be sent to Severn Trent Laboratories, which is a NJ certified laboratory. Laboratory analysis will be performed on an accelerated turn-around time of one week (5 working days). After receipt of analytical data, Ford will confirm PCBs greater than 0.49 ppm do not remain in the areas excavated. If PCBs > 0.49 ppm remain in the areas of excavation, additional excavation will occur.

Parcel B

Excavation of a section of the road on Parcel B has been completed and post excavation sampling was conducted in accordance with the plan approved by the NJDEP. For the remaining section of road on Parcel B, post excavation sampling will be as described above for Parcel A.

The post-excavation samples will be analyzed for PCBs and will be sent to Severn Trent Laboratories, which is a NJ certified laboratory. Laboratory analysis will be performed on an accelerated turn-around time of one week (5 working days). After receipt of analytical data, Ford Motor Co. will confirm PCBs above the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) do not remain in the areas excavated. If contaminants exceed the RDCSCC in the areas of excavation, additional excavation will occur.

Reporting

As required in the Administrative Order, Ford will provide the following information:

- Progress reports will be submitted to the NJDEP and the designated official from Hamilton Township on the 1st and 16th of each month of removal activity at the site. The progress report will include a summary of activities conducted and results of air monitoring for the period being summarized.
- A final report will be issued to the NJDEP and Hamilton Township officials within 14 days after completion of all remedial action activities and receipt of final analytical data. The final report will include a discussion of the procedures taken to eliminate all possible exposure from the material removed and the effectiveness of the procedures implemented to control fugitive dust emissions. The report will also include origin and disposal forms pursuant to Solid Waste Management regulations that identify all material removed form the site. This information will include the weight of the material and equivalent cubic yards.
- Other reports required by the NJDEP or other significant correspondence issued to the NJDEP will be provided to Hamilton Township officials.

Schedule

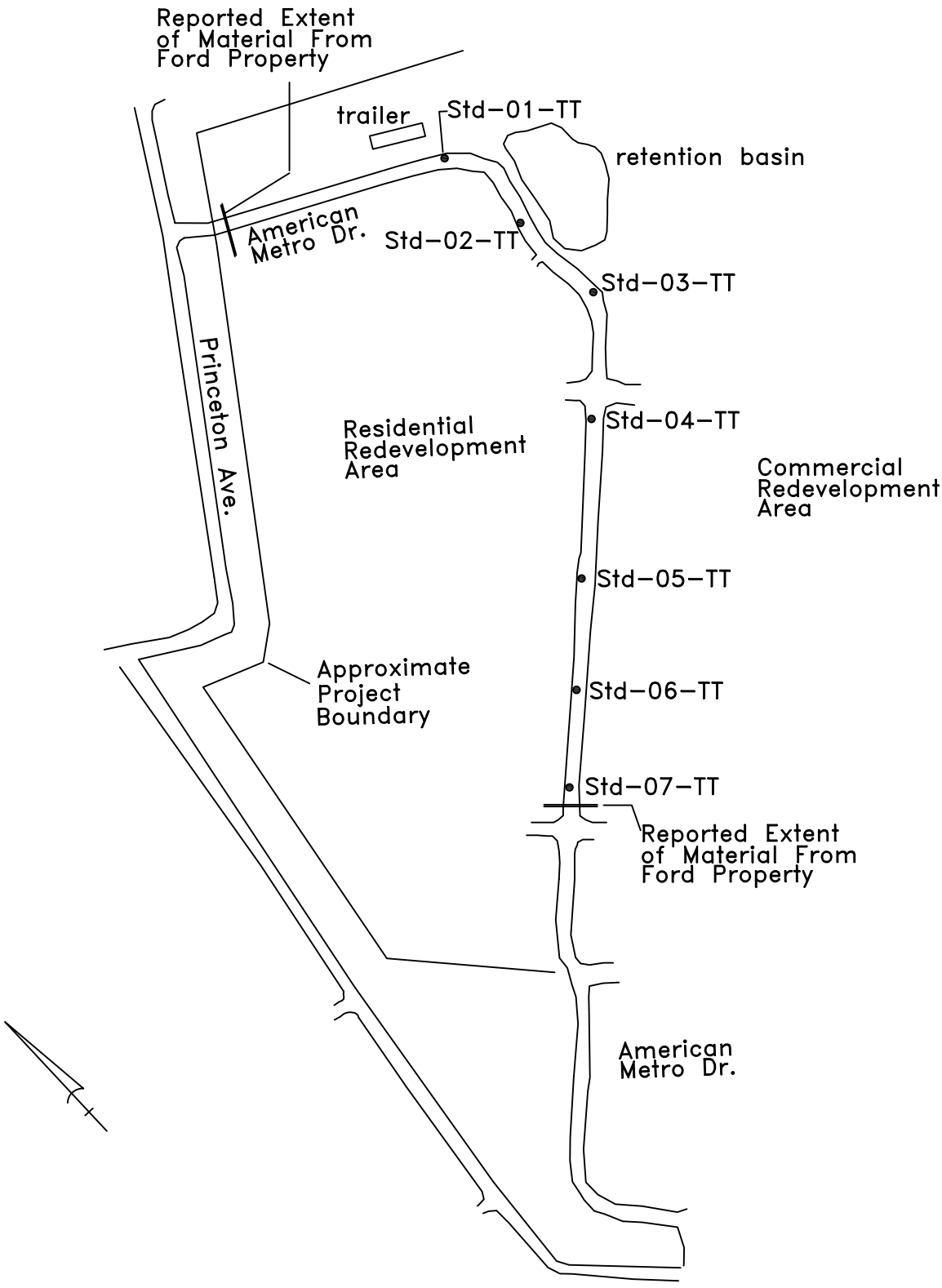
Ford will initiate work for the above referenced activities within 2 days after written approval from the NJDEP. Ford Motor Co. will complete remedial action activities within 30 days after approval of this plan.

Ford Motor Company will notify you prior to the start of any on-site activities and immediately if there are any changes to the schedule. If you have any questions, please contact me at 973-659-9996, extension 231.

Sincerely,

Douglas Sullivan
Senior Project Manager

ATTACHMENT 1
(Site Map)



TETRA TECH
ENGINEERS ARCHITECTS SCIENTISTS
Rockaway 80 Corporate Center
100 EnterPrise Drive, Suite 400
Rockaway, New Jersey 07866
973 659-9996 973 659-1287

CLIENT

FORD MOTOR COMPANY

SITE ID: AMERICAN METRO SITE
(formerly American Standard)
HAMILTON TOWNSHIP, NJ

SOIL SAMPLING OF AMERICAN METRO DRIVE
JANUARY 20th, 2006

SCALE	DRAWN BY:	CHECKED BY:	PROJ. NO.
NOT TO SCALE	JB	DS	IP483.03

PLOT DATE: 2/01/2006

ATTACHMENT B

ATTACHMENT 2
(Characterization Data)

Aggregate Material Characterization Results - Amer. Standard

Sample ID	Lab ID	Date Sampled	Analyte	RDCSCC (ppm)	NRDCSCC (ppm)	Haz Waste Level	Result	Units	Qual.	Exceeds Res. Crit.	Exceeds Non-Res. Crit.	Exceeds Haz Waste Level
std-01-TT	703164	1/20/2006	Chrysene	9	40		0.91	ppm				
std-01-TT	703164	1/20/2006	Benzo(k)fluoranthene	0.9	4		1.2	ppm		Yes		
std-01-TT	703164	1/20/2006	Phenanthrene				0.8	ppm				
std-01-TT	703164	1/20/2006	Acenaphthene	3400	10000		0.083	ppm	J			
std-01-TT	703164	1/20/2006	Tetrachloroethylene	4	6	0.7	0.0011	ppm				
std-01-TT	703164	1/20/2006	Benzo(a)pyrene	0.66	0.66		0.84	ppm		Yes	Yes	
std-01-TT	703164	1/20/2006	Naphthalene	230	4200		0.05	ppm	J			
std-01-TT	703164	1/20/2006	Benzo[g,h,i]perylene				0.31	ppm	J			
std-01-TT	703164	1/20/2006	PCB (Total)	0.49	2		1.33	ppm		Yes		
std-01-TT	703164	1/20/2006	Pyrene	1700	10000		1.3	ppm				
std-01-TT	703164	1/20/2006	Benzo(a)anthracene	0.9	4		0.63	ppm				
std-01-TT	703164	1/20/2006	Benzo[b]fluoranthene (3,4-Benzofl	0.9	4		0.68	ppm				
std-01-TT	703164	1/20/2006	Total Petroleum Hydrocarbons	3500	3500		1900	ppm				
std-01-TT	703164	1/20/2006	Indeno[1,2,3-cd]pyrene	0.9	4		0.31	ppm				
std-01-TT	703164	1/20/2006	Ignitability				160	deg F				
std-01-TT	703164	1/20/2006	Dibenz(a,h)anthracene	0.66	0.66		0.15	ppm				
std-01-TT	703164	1/20/2006	Fluoranthene	2300	10000		1.3	ppm				
std-01-TT	703164	1/20/2006	Fluorene	2300	10000		0.068	ppm	J			
std-01-TT	703164	1/20/2006	Barium	700	47000	100	0.22	ppm	B			
std-01-TT	703164	1/20/2006	Chromium			5	0.01	ppm	B			
std-01-TT	703164	1/20/2006	Corrosivity	12.5	12.5		11.45	std unit				
std-01-TT	703164	1/20/2006	Anthracene	10000	10000		0.21	ppm	J			
std-01-TT	703164	1/20/2006	Acenaphthylene				0.017	ppm	J			

Aggregate Material Characterization Results - Amer. Standard

Sample ID	Lab ID	Date Sampled	Analyte	RDCSCC (ppm)	NRDCSCC (ppm)	Haz Waste Level	Result	Units	Qual.	Exceeds Res. Crit.	Exceeds Non-Res. Crit.	Exceeds Haz Waste Level
std-02-TT	703165	1/20/2006	Phenanthrene				0.071	ppm	J			
std-02-TT	703165	1/20/2006	Benzo[b]fluoranthene (3,4-Benzofl	0.9	4		0.054	ppm				
std-02-TT	703165	1/20/2006	Fluoranthene	2300	10000		0.14	ppm	J			
std-02-TT	703165	1/20/2006	Total Petroleum Hydrocarbons				784	ppm				
std-02-TT	703165	1/20/2006	Chrysene	9	40		0.065	ppm	J			
std-02-TT	703165	1/20/2006	PCB (Total)	0.49	2		0.62	ppm		Yes		
std-02-TT	703165	1/20/2006	Indeno[1,2,3-cd]pyrene	0.9	4		0.034	ppm	J			
std-02-TT	703165	1/20/2006	Lead	400	600	5	0.06	ppm	B			
std-02-TT	703165	1/20/2006	Barium	700	47000	100	0.53	ppm	B			
std-02-TT	703165	1/20/2006	Benzo[g,h,i]perylene				0.039	ppm	J			
std-02-TT	703165	1/20/2006	Corrosivity	12.5	12.5		8.87	std unit				
std-02-TT	703165	1/20/2006	Ignitability				160	deg F				
std-02-TT	703165	1/20/2006	Benzo(k)fluoranthene	0.9	4		0.068	ppm				
std-02-TT	703165	1/20/2006	Anthracene	10000	10000		0.018	ppm	J			
std-02-TT	703165	1/20/2006	Benzo(a)pyrene	0.66	0.66		0.064	ppm				
std-02-TT	703165	1/20/2006	Benzo(a)anthracene	0.9	4		0.07	ppm				
std-02-TT	703165	1/20/2006	Pyrene	1700	10000		0.12	ppm	J			
std-03-TT	703166	1/20/2006	Pyrene	1700	10000		1.7	ppm				
std-03-TT	703166	1/20/2006	Acenaphthylene				0.029	ppm	J			
std-03-TT	703166	1/20/2006	Barium	700	47000	100	0.22	ppm	B			
std-03-TT	703166	1/20/2006	Lead	400	600	5	0.11	ppm	B			
std-03-TT	703166	1/20/2006	Chrysene	9	40		0.62	ppm	J			
std-03-TT	703166	1/20/2006	Benzo(a)anthracene	0.9	4		0.4	ppm				
std-03-TT	703166	1/20/2006	Corrosivity	12.5	12.5		5.99	std unit				

Aggregate Material Characterization Results - Amer. Standard

Sample ID	Lab ID	Date Sampled	Analyte	RDCSCC (ppm)	NRDCSCC (ppm)	Haz Waste Level	Result	Units	Qual.	Exceeds Res. Crit.	Exceeds Non-Res. Crit.	Exceeds Haz Waste Level
std-03-TT	703166	1/20/2006	Total Petroleum Hydrocarbons				98.3	ppm				
std-03-TT	703166	1/20/2006	Heptachlor	0.15	0.65	0.008	0.00072	ppm	P*			
std-03-TT	703166	1/20/2006	Naphthalene	230	4200		0.048	ppm	J			
std-03-TT	703166	1/20/2006	Ignitability				160	deg F				
std-03-TT	703166	1/20/2006	Fluoranthene	2300	10000		0.78	ppm				
std-03-TT	703166	1/20/2006	Phenanthrene				0.57	ppm	J			
std-03-TT	703166	1/20/2006	Fluorene	2300	10000		0.042	ppm	J			
std-03-TT	703166	1/20/2006	Acenaphthene	3400	10000		0.057	ppm	J			
std-03-TT	703166	1/20/2006	Anthracene	10000	10000		0.19	ppm	J			
std-04-TT	703167	1/20/2006	Fluoranthene	2300	10000		9.6	ppm				
std-04-TT	703167	1/20/2006	Lead	400	600	5	20	ppm				Yes
std-04-TT	703167	1/20/2006	Anthracene	10000	10000		2.1	ppm				
std-04-TT	703167	1/20/2006	Dibenz(a,h)anthracene	0.66	0.66		0.7	ppm		Yes	Yes	
std-04-TT	703167	1/20/2006	Acenaphthene	3400	10000		0.74	ppm				
std-04-TT	703167	1/20/2006	Benzo(a)anthracene	0.9	4		5.3	ppm		Yes	Yes	
std-04-TT	703167	1/20/2006	Benzo[b]fluoranthene (3,4-Benzofl	0.9	4		3.7	ppm		Yes		
std-04-TT	703167	1/20/2006	Acenaphthylene				0.055	ppm	J			
std-04-TT	703167	1/20/2006	Benzo[g,h,i]perylene				1.8	ppm				
std-04-TT	703167	1/20/2006	Benzo(a)pyrene	0.66	0.66		4.2	ppm		Yes	Yes	
std-04-TT	703167	1/20/2006	Benzo(k)fluoranthene	0.9	4		4.4	ppm		Yes	Yes	
std-04-TT	703167	1/20/2006	Cadmium	39	100	1	0.04	ppm				
std-04-TT	703167	1/20/2006	Chrysene	9	40		5.2	ppm				
std-04-TT	703167	1/20/2006	Phenanthrene				6.4	ppm				
std-04-TT	703167	1/20/2006	Indeno[1,2,3-cd]pyrene	0.9	4		1.8	ppm		Yes		

Sample ID	Lab ID	Date Sampled	Analyte	RDCSCC (ppm)	NRDCSCC (ppm)	Haz Waste Level	Result	Units	Qual.	Exceeds Res. Crit.	Exceeds Non-Res. Crit.	Exceeds Haz Waste Level
std-04-TT	703167	1/20/2006	Ignitability				160	deg F				
std-04-TT	703167	1/20/2006	Arsenic	20	20	5	0.1	ppm				
std-04-TT	703167	1/20/2006	Barium	700	47000	100	2	ppm				
std-04-TT	703167	1/20/2006	Naphthalene	230	4200		0.22	ppm	J			
std-04-TT	703167	1/20/2006	Total Petroleum Hydrocarbons				12300	ppm		Yes	Yes	
std-04-TT	703167	1/20/2006	Fluorene	2300	10000		0.82	ppm				
std-04-TT	703167	1/20/2006	Corrosivity	12.5	12.5		8.37	std unit				
std-04-TT	703167	1/20/2006	Pyrene	1700	10000		8.8	ppm				
std-05-TT	703168	1/20/2006	Benzo(a)pyrene	0.66	0.66		0.17	ppm				
std-05-TT	703168	1/20/2006	Ignitability				160	deg F				
std-05-TT	703168	1/20/2006	Silver	110	4100	5	0.01	ppm	B			
std-05-TT	703168	1/20/2006	Phenanthrene				0.13	ppm	J			
std-05-TT	703168	1/20/2006	Benzo(a)anthracene	0.9	4		0.09	ppm				
std-05-TT	703168	1/20/2006	Pyrene	1700	10000		0.2	ppm	J			
std-05-TT	703168	1/20/2006	Benzo[b]fluoranthene (3,4-Benzofl	0.9	4		0.15	ppm				
std-05-TT	703168	1/20/2006	Chloroform	19	28	6	0.0017	ppm	J			
std-05-TT	703168	1/20/2006	Benzo(k)fluoranthene	0.9	4		0.22	ppm				
std-05-TT	703168	1/20/2006	Barium	700	47000	100	0.53	ppm	B			
std-05-TT	703168	1/20/2006	Chrysene	9	40		0.15	ppm	J			
std-05-TT	703168	1/20/2006	Total Petroleum Hydrocarbons				1430	ppm				
std-05-TT	703168	1/20/2006	Arsenic	20	20	5	0.02	ppm	B			
std-05-TT	703168	1/20/2006	Corrosivity	12.5	12.5		7.43	std unit				
std-05-TT	703168	1/20/2006	Lead	400	600	5	1.2	ppm				
std-05-TT	703168	1/20/2006	Anthracene	10000	10000		0.043	ppm	J			

Aggregate Material Characterization Results - Amer. Standard

Sample ID	Lab ID	Date Sampled	Analyte	RDCSCC (ppm)	NRDCSCC (ppm)	Haz Waste Level	Result	Units	Qual.	Exceeds Res. Crit.	Exceeds Non-Res. Crit.	Exceeds Haz Waste Level
std-05-TT	703168	1/20/2006	Cadmium	39	100	1	0.01	ppm	B			
std-05-TT	703168	1/20/2006	Chromium			5	0.01	ppm	B			
std-05-TT	703168	1/20/2006	Fluoranthene	2300	10000		0.17	ppm	J			
std-06-TT	703169	1/20/2006	Fluorene	2300	10000		1.1	ppm				
std-06-TT	703169	1/20/2006	Naphthalene	230	4200		0.21	ppm	J			
std-06-TT	703169	1/20/2006	PCB (Total)	0.49	2		0.55	ppm		Yes		
std-06-TT	703169	1/20/2006	Ignitability				160	deg F				
std-06-TT	703169	1/20/2006	Phenanthrene				8.4	ppm				
std-06-TT	703169	1/20/2006	Benzo[g,h,i]perylene				1.8	ppm				
std-06-TT	703169	1/20/2006	Total Petroleum Hydrocarbons				1200	ppm				
std-06-TT	703169	1/20/2006	Benzo[b]fluoranthene (3,4-Benzofl	0.9	4		4.8	ppm		Yes	Yes	
std-06-TT	703169	1/20/2006	Dibenz(a,h)anthracene	0.66	0.66		0.73	ppm		Yes	Yes	
std-06-TT	703169	1/20/2006	Anthracene	10000	10000		2.7	ppm				
std-06-TT	703169	1/20/2006	Acenaphthylene				0.072	ppm	J			
std-06-TT	703169	1/20/2006	Acenaphthene	3400	10000		1.1	ppm				
std-06-TT	703169	1/20/2006	Benzo(k)fluoranthene	0.9	4		5.3	ppm		Yes	Yes	
std-06-TT	703169	1/20/2006	Barium	700	47000	100	0.19	ppm	B			
std-06-TT	703169	1/20/2006	Chromium			5	0.02	ppm	B			
std-06-TT	703169	1/20/2006	Pyrene	1700	10000		11	ppm				
std-06-TT	703169	1/20/2006	Benzo(a)pyrene	0.66	0.66		5.2	ppm		Yes	Yes	
std-06-TT	703169	1/20/2006	Fluoranthene	2300	10000		12	ppm				
std-06-TT	703169	1/20/2006	Indeno[1,2,3-cd]pyrene	0.9	4		2	ppm		Yes		
std-06-TT	703169	1/20/2006	Benzo(a)anthracene	0.9	4		6.7	ppm		Yes	Yes	
std-06-TT	703169	1/20/2006	Chrysene	9	40		6.4	ppm				

Aggregate Material Characterization Results - Amer. Standard

Sample ID	Lab ID	Date Sampled	Analyte	RDCSCC (ppm)	NRDCSCC (ppm)	Haz Waste Level	Result	Units	Qual.	Exceeds Res. Crit.	Exceeds Non-Res. Crit.	Exceeds Haz Waste Level
std-06-TT	703169	1/20/2006	Corrosivity	12.5	12.5		11.47	std unit				
std-07-TT	703170	1/20/2006	Cadmium	39	100	1	0.04	ppm				
std-07-TT	703170	1/20/2006	Benzo[b]fluoranthene (3,4-Benzofl	0.9	4		1.3	ppm		Yes		
std-07-TT	703170	1/20/2006	Corrosivity	12.5	12.5		9.03	std unit				
std-07-TT	703170	1/20/2006	Chrysene	9	40		1.2	ppm				
std-07-TT	703170	1/20/2006	Total Petroleum Hydrocarbons				8230	ppm		Yes	Yes	
std-07-TT	703170	1/20/2006	Benzo(a)pyrene	0.66	0.66		1.2	ppm		Yes	Yes	
std-07-TT	703170	1/20/2006	Acenaphthylene				0.027	ppm	J			
std-07-TT	703170	1/20/2006	Lead	400	600	5	19.1	ppm				Yes
std-07-TT	703170	1/20/2006	Ignitability				160	deg F				
std-07-TT	703170	1/20/2006	Pyrene	1700	10000		3.2	ppm				
std-07-TT	703170	1/20/2006	Barium	700	47000	100	1.6	ppm				
std-07-TT	703170	1/20/2006	PCB (Total)	0.49	2		0.39	ppm				
std-07-TT	703170	1/20/2006	Arsenic	20	20	5	0.04	ppm	B			
std-07-TT	703170	1/20/2006	Anthracene	10000	10000		0.3	ppm	J			
std-07-TT	703170	1/20/2006	Fluorene	2300	10000		0.12	ppm	J			
std-07-TT	703170	1/20/2006	Naphthalene	230	4200		0.064	ppm	J			
std-07-TT	703170	1/20/2006	Benzo(k)fluoranthene	0.9	4		1.7	ppm		Yes		
std-07-TT	703170	1/20/2006	Phenanthrene				1.3	ppm				
std-07-TT	703170	1/20/2006	Acenaphthene	3400	10000		0.12	ppm	J			
std-07-TT	703170	1/20/2006	Benzo(a)anthracene	0.9	4		0.8	ppm				
std-07-TT	703170	1/20/2006	Fluoranthene	2300	10000		2	ppm				

ATTACHMENT 3
(Post-Excavation Sampling Plan)

RESPONSE PLAN ADDENDUM
POST EXCAVATION SAMPLING PLAN FOR ROAD
PARCEL A - PART OF FORMER AMERICAN STANDARD FACILITY

RT Environmental Services, Inc. (RT) has prepared this post excavation sampling plan, as an Addendum to the Tetra Tech Response Plan, for those sections of Metro Road located on Parcel A where PCB-impacted crushed concrete was placed as sub-base material. The purpose of this post excavation plan is to ensure complete removal of the PCB-impacted material received from the Ford, Edison site, while appropriately dealing with previously identified constituents of concern being remediated under an MOA with the New Jersey Department of Environmental Protection (NJDEP).

Pre-Excavation Characterization

To characterize the area, 19 pre-excavation samples were collected from along the 1,350 foot unpaved section of the roadway on Parcel A (12 by ELM, 3 by RT Environmental and 4 by Tetra Tech - see Attachment 1). Based on the analytical results of the 19 pre-excavation samples, PCBs were not detected along an approximately 600-foot section of the road (area defined by ELM sample locations, 7 to 11; see attached figure). Consistent with the data, no noticeable concrete was observed in this section of the road.

For the remaining sections of the road, PCBs were detected in only one sample above the NJDEP unrestricted use soil PCB cleanup criterion of 0.49 mg/kg (see Attachment 2).

Post-Excavation Sampling Activities

To address the limited occurrence of PCBs on the Parcel A road, concrete material and associated soil will be excavated from along the 1,350 foot section of the road on Parcel A. Based on the approximately 1,350 foot length and the road's width of approximately 28 feet, the total area to be excavated is approximately 38,000 square feet. After excavation of concrete and associated soil, post excavation samples will be collected at a frequency of approximately 1 per 900 square feet, for a total of approximately 42 samples. This sampling frequency is consistent with the most stringent post excavation sampling requirement of the Technical Requirements for Site Remediation. The same frequency will be used to confirm adequate removal of temporary stockpiled materials in areas where no concrete is to be removed.

Because the concrete sub-base material was placed between the existing curbing and associated footings, no sidewall samples are expected to be needed. However, if the excavation, guided by the visual indication of crushed concrete presence, extends below the footing of the curb, sidewall samples will be collected at approximately 30-foot intervals along the length of the excavation where it extends below the footing. This sampling frequency is consistent with the most stringent post excavation side wall sampling requirement of the Technical Requirements for Site

Remediation. If the excavation extends below the footing of the curb on both sides of the road for the entire length of the excavation, 90 side wall samples will be collected.

Pottery Related Material

As part of the characterization process for the disposal of the concrete/soil material, Ford had four samples collected from Parcel A. Two samples, STD-4 and -7 failed the TCLP test for lead. Based on Ford/Tetratech logs, which describe a "blue" material, these are believed to have encountered small pockets of underlying blue frit material.

During the excavation, continuous observation will be made by RT and any blue frit material will be managed as per the previously-approved Remedial Action Workplan (RAWP). When blue frit material is encountered, the following procedures per the previously approved RAWP will be followed:

1. The Environmental Representative will be immediately notified.
2. The location of the material will be recorded with a handheld Global Positioning System (GPS) unit for future reference.
3. The area will be clearly marked.
4. The area will be wetted, as needed, to control dust.
5. The blue frit material will be excavated and placed in a lined, roll off container, as directed by the Environmental Representative.
6. The roll off will be properly covered at the end of each work day.
7. All equipment will be decontaminated in accordance with the procedures outlined in Section 7.0 of the Soil/Material Reuse Plan.

Following removal of the blue frit material, post excavation sampling and/or delineation will be conducted in accordance with the procedures outlined in the approved RAW Addendum.

Post excavation sampling for lead will not be conducted after removing pockets of blue frit encountered in Area 2 because deeper material deposits are known to have lead concentrations exceeding the non-residential soil cleanup standard. Blue frit pockets in Area 2 will be excavated to a minimum depth of 11" to 12" below finished grade (bfg). This will assure that there will be sufficient vertical dimension to place the aggregate, sub-base, and asphalt cap materials.

The entire excavation and ongoing physical separation of crushed concrete from underlying AOC materials will be continuously observed by the Environmental Representative. Because the crushed concrete was used in the cap layer above the AOC material, continuous observation of each piece of construction excavation equipment by the Environmental Representative will be required. This will assure that where crushed concrete may have worked into the AOC material due to rutting or wet pockets created during passage of construction traffic, that excavation to remove all PCBs is properly guided. In any areas where materials cannot be visually separated, mixed

PCB/AOC material will be separately stockpiled, placed on tarp(s), and covered by tarp(s), and further characterized for PCBs and AOC constituents before leaving the site.

The work will be considered complete when:

- All crushed concrete is physically excavated;
- Post excavation samples meet all unrestricted use SCC's (in non-AOC areas) or results are less than already documented results for constituents of concern in underlying previous known AOC areas;
- All blue frit is separated for offsite transportation and disposal as hazardous waste; and, any mixed materials are properly managed by offsite disposal as well.

After post-excavation samples are collected, that portion of the roadway will be covered with a properly secured Geotextile material. The Geotextile can be removed to conduct additional excavation work or sampling.

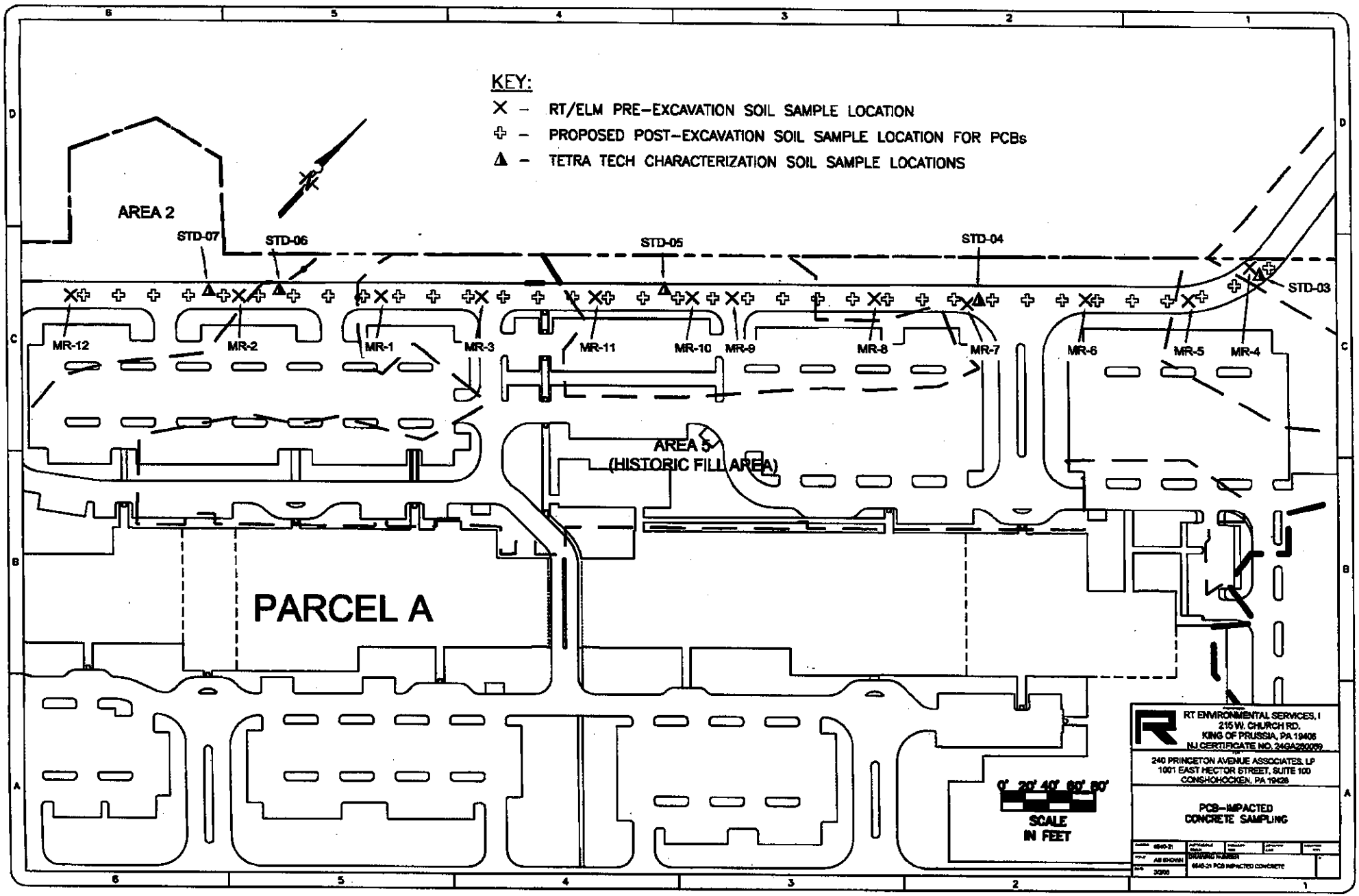
The NJDEP Case Manager will be notified when removal work is complete so that an inspection may be conducted prior to placing quarried, crushed rock as new fill. The new fill must be sampled and tested before being brought on site, as required by Hamilton Township. Clearance will then be given to resume roadway construction per the capping detail already approved and a Remedial Action Report will be submitted to the Department.

Attachments

ATTACHMENTS

ATTACHMENT 1

SAMPLE LOCATIONS


KEY:
X – RT/ELM PRE-EXCAVATION SOIL SAMPLE LOCATION
✣ – PROPOSED POST-EXCAVATION SOIL SAMPLE LOCATION FOR PCBs
▲ – TETRA TECH CHARACTERIZATION SOIL SAMPLE LOCATIONS
AREA 2
STD-07
STD-06
STD-05
STD-04
STD-03
MR-12
MR-2
MR-1
MR-3
MR-11
MR-10
MR-9
MR-8
MR-7
MR-6
MR-5
MR-4
AREA 5
(HISTORIC FILL AREA)
PARCEL A
0' 20' 40' 60' 80'
SCALE
IN FEET
RT ENVIRONMENTAL SERVICES, I
215 W. CHURCH RD.
KING OF PRUSSIA, PA 19406
NJ CERTIFICATE NO. 24GA280059
240 PRINCETON AVENUE ASSOCIATES, LP
1001 EAST HECTOR STREET, SUITE 100
CONSHOHOCKEN, PA 19428
PCB-IMPACTED
CONCRETE SAMPLING
6645-21
AS SHOWN
3/06
6645-21 PCB IMPACTED CONCRETE

ATTACHMENT 2

ANALYTICAL RESULTS TABLE

TABLE 1
AMERTICAN METRO
ROAD-BED SAMPLES - 12/22/05
RT RESULTS SUMMARY

Analyte	Metro Road - 1	Metro Road - 2	Metro Road - 3	RDCSCC*	NRDCSCC**
Arochlor 1248	0.35	<0.05	<0.05	-	-
Arochlor 1254	0.19	<0.05	<0.05	-	-
Total	**0.54**	<0.1	<0.1	0.49	2

* Residential Direct Contact Soil Cleanup Criteria
** Non-Residential Direct Contact Soil Cleanup Criteria
All units in mg/kg (ppm)

ATTACHMENT 4
(Dust Management Plan)

DUST MONITORING PLAN

EXCLUSION ZONE MONITORING:

Purpose: Evaluate release of dust in zones to determine proper dust control measures.

- Exclusion zone (where work activities will occur) will be established.
- PDR-1000 Dust monitors will be located downwind at the perimeters of the exclusion zones.
- Action levels to implement dust control will be sustained readings (5 minutes) above 5 mg/m^3.
- Visual assessment of dust levels will be used to implement dust control.
- Dust control measures shall be water or dry agents during cold weather and shall be on-site at all times.

PERIMETER MONITORING:

Purpose: To identify and control off-site dust emissions.

- Determine strategic perimeter sampling locations based on wind direction, on-site operations, neighboring properties, public thoroughfares, and NJ DEP concurrence.
- DR-4000 respirable particulate monitors (PM-10) with omni-directional inlets will be used to measure levels of respirable dust at perimeter of the property.
- Action levels to implement dust control or to trigger monitor for specific contaminates of concern (i.e. PCB's) will be sustained readings (15 minutes) above 150 ug/m^3 as identified in the National Ambient Air Quality Standards (NAAQS). (See Attachment A-NAAQS Standards)

PERSONAL MONITORING:

Purpose: Evaluate worker exposure during normal work activities to be able to wear appropriate PPE.

- Determine personnel exposure of worker.
- Monitoring for total dust.
- Use pre-weighed filter cassettes and a low flow pump for dust sampling. (See Attachment B-Sampling Methods)
- Action level to implement upgrade of personal protection equipment (PPE) for dust is 15 mg/m^3.

Based on the low levels of PCB's (Generally 2 ppm) the action level for dust that would trigger PCB concerns and monitoring is estimated at 500 mg/m^{3*}. If this action level is exceeded monitoring for PCB's will require the following:

- Use sorbent tube and low flow pump for PCB sampling. (See Attachment B-Sampling Methods)
- Action level to implement upgrade of personal protection for PCB's is 0.001 mg/m^3 for the National Institute for Occupational Safety and Health (NIOSH) and 1 mg/m^3 for the Occupational Safety and Health Administration (OSHA). Tetra Tech recommends using the NIOSH standard as an action level for upgrading PPE.

Formula to correlate PCB levels in soil to dust levels is:

(Calculation: Convert PCB soil levels to a fraction (2 mg/kg = 0.000002) and multiply by the particulate concentration). For example if the particulate concentration is at 500 mg/m^3 then the concentration of PCB in air is 0.001 mg/m^3, which is the REL.

METEOROLOGICAL STATION:

Purpose: To record weather conditions related to the site.

- Determine location of METSTATION.
- Record daily the temperature, relative humidity, barometric pressure, wind speed and direction.
- Assess this information and correlate with particulate monitoring results.

REPORTING:

Purpose: To ensure communications between all parties.

- Progress reports will be submitted to Ford prior to the 1st and 16th of each month. Ford will issue reports to the NJDEP and municipal officials in accordance with the Administrative Order EA ID #: PI V1166.
- Progress reports will summarize results of the perimeter monitoring and meteorological information during that period.
- Final report will be generated at the end of the project and will include all perimeter monitoring results, meteorological information, and field documentation logs ensuring the effectiveness of the dust management plan. Ford will issue reports to the NJDEP and municipal officials in accordance with the Administrative Order EA ID #: PI V1166.

CONCLUSION:

Monitoring of dust levels will take place prior to removal activities, during removal activities, and after removal activities are complete.

ATTACHMENT A
(NAAQS Standards)

National Ambient Air Quality Standards

POLLUTANT	STANDARD VALUE *		STANDARD TYPE
Carbon Monoxide (CO)			
8-hour Average	9 ppm	(10 mg/m^3)	Primary
1-hour Average	35 ppm	(40 mg/m^3)	Primary
Nitrogen Dioxide (NO_2)			
Annual Arithmetic Mean	0.053 ppm	(100 $\mu g/m^3$)	Primary & Secondary
Ozone (O_3)			
1-hour Average	0.12 ppm	(235 $\mu g/m^3$)	Primary & Secondary
8-hour Average	0.08 ppm	(157 $\mu g/m^3$)	Primary & Secondary
Lead (Pb)			
Quarterly Average	1.5 $\mu g/m^3$		Primary & Secondary
Particulate (PM 10)	*Particles with diameters of 10 micrometers or less*		
Annual Arithmetic Mean	50 $\mu g/m^3$		Primary & Secondary
24-hour Average	150 $\mu g/m^3$		Primary & Secondary
Particulate (PM 2.5)	*Particles with diameters of 2.5 micrometers or less*		
Annual Arithmetic Mean	15 $\mu g/m^3$		Primary & Secondary
24-hour Average	65 $\mu g/m^3$		Primary & Secondary
Sulfur Dioxide (SO_2)			
Annual Arithmetic Mean	0.030 ppm	(80 $\mu g/m^3$)	Primary
24-hour Average	0.14 ppm	(365 $\mu g/m^3$)	Primary
3-hour Average	0.50 ppm	(1300 $\mu g/m^3$)	Secondary

* Parenthetical value is an approximately equivalent concentration.

ATTACHMENT B
(Sampling Methods)

SKC Home
Homeland Security
Contact SKC
Search
Products
Ordering
What's New
Customer Service
Rentals
Downloads
Sales & Service
Email Newsletter
Catalog Request
Sampling Help
Sampling Guides
Laboratories
Links
About SKC
Events / Seminars
Site Map

Guide to OSHA/NIOSH/ASTM Air Sampling Methods

Dust total nuisance

Chemical Hazard: Dust total nuisance

Agency Reference: OSHA CSI

Agency Standards

TWA (ppm): 15 mg/m3

Sample Volume (liter)

TWA: 720

Sampling Rate (ml/min)

TWA: 1500

Sampling Time

TWA (hours): 8

Analytical Method: GR -- Gravimetric Analysis

SKC Equimpent: Filter 225-8-01SC
Filter Cassette and Cyclone Holder 225-1
Filter Cassette 225-2LF

Footnotes: CSI-OSHA Chemical Sampling Information (OSHA CD-ROM

Chemical Hazards by First Letter

SKC Home
Homeland Security
Contact SKC
Search
Products
Ordering
What's New
Customer Service
Rentals
Downloads
Sales & Service
Email Newsletter
Catalog Request
Sampling Help
Sampling Guides
Laboratories
Links
About SKC
Events / Seminars
Site Map

Guide to OSHA/NIOSH/ASTM Air Sampling Methods

Polychlorinated biphenyls

Chemical Hazard: Polychlorinated biphenyls

CAS Number: 1336-36-3

Agency Reference: NIOSH 5503

Agency Standards

TWA (ppm): 0.001 mg/m3 (10 hr)

Sample Volume (liter)

TWA: 48

Sampling Rate (ml/min)

TWA: 100 (200)

Sampling Time

TWA (hours): 8 (4)

Analytical Method: GC-ECD -- Gas Chromatography-Electron Capture Detecto

SKC Equimpent: Filter 225-16
Filter Cassette 225-32
Sorbent Tube 226-39

Limit of Detection: 0.03µg/sample

LOD Note: The policies of the AIHA laboratory accreditation committee require that method detection limits must be established and